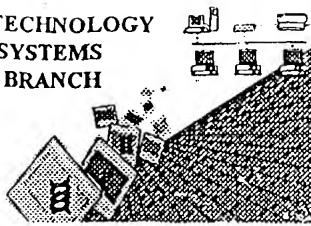# RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10|642,284_

Source: _IFWO_

Date Processed by STIC: _2/24/04_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221
Effective 12/13/03: **TELEPHONE: 571-272-2510; FAX: 571-273-0221**

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

IFWO

RAW SEQUENCE LISTING   DATE: 02/24/2004
PATENT APPLICATION: US/10/642,284   TIME: 14:34:56

    Input Set : A:\2004-02-18 4600-0106P.ST25.txt
    Output Set: N:\CRF4\02242004\J642284.raw

```
 3 <110> APPLICANT: KUMAGAI, Izumi et al.
 5 <120> TITLE OF INVENTION: NOVEL DIABODY-TYPE BISPECIFIC ANTIBODY
 7 <130> FILE REFERENCE: 4600-0106P
 9 <140> CURRENT APPLICATION NUMBER: US 10/642,284
10 <141> CURRENT FILING DATE: 2003-08-18
12 <150> PRIOR APPLICATION NUMBER: JP 2003-038643
13 <151> PRIOR FILING DATE: 2003-02-17
15 <160> NUMBER OF SEQ ID NOS: 40
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 33
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: A NcoI-5H back primer
27 <400> SEQUENCE: 1
28 nnnccatggc ccaggtccag ctgcagcagt ctg       33
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 28
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
36 <220> FEATURE:
37 <223> OTHER INFORMATION: B 5H-EagI forward primer
39 <400> SEQUENCE: 2
40 nnncggccga ggagactgtg agagtggt            28
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 26
45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial Sequence
48 <220> FEATURE:
49 <223> OTHER INFORMATION: C EcoRV-5L back primer
51 <400> SEQUENCE: 3
52 nnngatatcc taatgaccca atctcc              26
55 <210> SEQ ID NO: 4
56 <211> LENGTH: 29
57 <212> TYPE: DNA
58 <213> ORGANISM: Artificial Sequence
60 <220> FEATURE:
61 <223> OTHER INFORMATION: D 5L-SacII forward primer
63 <400> SEQUENCE: 4
64 nnnccgcggc acgtttgatt tccagcttg           29
67 <210> SEQ ID NO: 5
68 <211> LENGTH: 32
```

[Handwritten annotations:] mandatory, please explain "N" locations. please see error explanation on page 7. Does Not Comply. Corrected Diskette Needed (pg. 1-3, 6-8)

W--> (lines 28, 40, 52, 64 marked)

please explain (multiple handwritten notes in left margin)

RAW SEQUENCE LISTING   DATE: 02/24/2004
PATENT APPLICATION: US/10/642,284   TIME: 14:34:56

Input Set : A:\2004-02-18 4600-0106P.ST25.txt
Output Set: N:\CRF4\02242004\J642284.raw

Same errors

```
     69 <212> TYPE: DNA
     70 <213> ORGANISM: Artificial Sequence
     72 <220> FEATURE:
     73 <223> OTHER INFORMATION: E NcoI-h5H back primer
     75 <400> SEQUENCE: 5
W--> 76 (nnn)catggc ccaggtgcaa ctggttcaga gc        32
     79 <210> SEQ ID NO: 6
     80 <211> LENGTH: 29
     81 <212> TYPE: DNA
     82 <213> ORGANISM: Artificial Sequence
     84 <220> FEATURE:
     85 <223> OTHER INFORMATION: F h5H-EagI forward primer
     87 <400> SEQUENCE: 6
W--> 88 (nnn)cggccga gctcacggta accagcgta           29
     91 <210> SEQ ID NO: 7
     92 <211> LENGTH: 23
     93 <212> TYPE: DNA
     94 <213> ORGANISM: Artificial Sequence
     96 <220> FEATURE:
     97 <223> OTHER INFORMATION: G EcoRV-hOL back primer
     99 <400> SEQUENCE: 7
W--> 100 (nnn)gatatcc agatgaccca gag                 23
     103 <210> SEQ ID NO: 8
     104 <211> LENGTH: 23
     105 <212> TYPE: DNA
     106 <213> ORGANISM: Artificial Sequence
     108 <220> FEATURE:
     109 <223> OTHER INFORMATION: H hOL-SacII forward primer
     111 <400> SEQUENCE: 8
W--> 112 (nnn)ccgcggc gcgggtaatc tgc                 23
     115 <210> SEQ ID NO: 9
     116 <211> LENGTH: 26
     117 <212> TYPE: DNA
     118 <213> ORGANISM: Artificial Sequence
     120 <220> FEATURE:
     121 <223> OTHER INFORMATION: I NcoI-hOH back primer
     124 <400> SEQUENCE: 9
W--> 125 (nnn)ccatggc ccaggtgcaa ctggtg             26
     128 <210> SEQ ID NO: 10
     129 <211> LENGTH: 23
     130 <212> TYPE: DNA
     131 <213> ORGANISM: Artificial Sequence
     133 <220> FEATURE:
     134 <223> OTHER INFORMATION: J hOH-EagI forward primer
     136 <400> SEQUENCE: 10
W--> 137 (nnn)cggccga gctaacggtc acc                 23
     140 <210> SEQ ID NO: 11
     141 <211> LENGTH: 26
     142 <212> TYPE: DNA
```

```
     143 <213> ORGANISM: Artificial Sequence      same error
     145 <220> FEATURE:
     146 <223> OTHER INFORMATION: K EcoRV-h5L back primer
     148 <400> SEQUENCE: 11
W--> 149 nngatatcg tgatgaccca gagccc              26
     152 <210> SEQ ID NO: 12
     153 <211> LENGTH: 36
     154 <212> TYPE: DNA
     155 <213> ORGANISM: Artificial Sequence    same error
     157 <220> FEATURE:
     158 <223> OTHER INFORMATION: L h5L-SacII forward primer
     160 <400> SEQUENCE: 12
W--> 161 nnccgcggc gcgtttaatt tccactttgg tgccac 36
     164 <210> SEQ ID NO: 13
     165 <211> LENGTH: 27
     166 <212> TYPE: DNA
     167 <213> ORGANISM: Artificial Sequence
     169 <220> FEATURE:
     170 <223> OTHER INFORMATION: M h5H-M48I(+)
     172 <400> SEQUENCE: 13
     173 gcctggaatg gattggtaac atttatc            27
     176 <210> SEQ ID NO: 14
     177 <211> LENGTH: 27
     178 <212> TYPE: DNA
     179 <213> ORGANISM: Artificial Sequence
     181 <220> FEATURE:
     182 <223> OTHER INFORMATION: N h5H-M48I(-)
     184 <400> SEQUENCE: 14
     185 gataaatgtt accaatccat tccaggc            27
     188 <210> SEQ ID NO: 15
     189 <211> LENGTH: 21
     190 <212> TYPE: DNA
     191 <213> ORGANISM: Artificial Sequence
     193 <220> FEATURE:
     194 <223> OTHER INFORMATION: O h5H-A93T(+)
     196 <400> SEQUENCE: 15
     197 tattactgca cgcgcagtgg c                  21
     200 <210> SEQ ID NO: 16
     201 <211> LENGTH: 21
     202 <212> TYPE: DNA
     203 <213> ORGANISM: Artificial Sequence
     205 <220> FEATURE:
     206 <223> OTHER INFORMATION: P h5H-A93T(-)
     208 <400> SEQUENCE: 16
     209 gccactgcgc gtgcagtaat a                  21
     212 <210> SEQ ID NO: 17
     213 <211> LENGTH: 38
     214 <212> TYPE: DNA
     215 <213> ORGANISM: Artificial Sequence
```

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING   DATE: 02/24/2004
PATENT APPLICATION: US/10/642,284   TIME: 14:34:56

Input Set : A:\2004-02-18 4600-0106P.ST25.txt
Output Set: N:\CRF4\02242004\J642284.raw

217 <220> FEATURE:
218 <223> OTHER INFORMATION: Q h5H-R66KR71V(+)
220 <400> SEQUENCE: 17
221 atttaagaac aaagtgacca tgacggttga taccagca   38.
224 <210> SEQ ID NO: 18
225 <211> LENGTH: 38
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: R h5H-R66KR71V(-)
232 <400> SEQUENCE: 18
233 tgctggtatc aaccgtcatg gtcactttgt tcttaaat   38
236 <210> SEQ ID NO: 19
237 <211> LENGTH: 21
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: S h5H-Y27D(+)
244 <400> SEQUENCE: 19
245 gcctcaggcg atacctttac g   21
248 <210> SEQ ID NO: 20
249 <211> LENGTH: 21
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: T h5H-Y27D(-)
256 <400> SEQUENCE: 20
257 cgtaaaggta tcgcctgagg c   21
260 <210> SEQ ID NO: 21
261 <211> LENGTH: 35
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: U h5H-M69LT73R(+)
268 <400> SEQUENCE: 21
269 caaagtgacc ctgacggttg atcgcagcat ttcga   35
272 <210> SEQ ID NO: 22
273 <211> LENGTH: 35
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: V h5H-M69LT73R(-)
280 <400> SEQUENCE: 22
281 tcgaaatgct gcgatcaacc gtcagggtca ctttg   35
284 <210> SEQ ID NO: 23
285 <211> LENGTH: 30
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:

RAW SEQUENCE LISTING   DATE: 02/24/2004
PATENT APPLICATION: US/10/642,284   TIME: 14:34:56

Input Set : A:\2004-02-18 4600-0106P.ST25.txt
Output Set: N:\CRF4\02242004\J642284.raw

```
290 <223> OTHER INFORMATION: W h5H-I75SS76RA78V(+)
292 <400> SEQUENCE: 23
293 gataccagca gtcgcacggt ctatatggaa           30
296 <210> SEQ ID NO: 24
297 <211> LENGTH: 30
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: X h5H-I75SS76RA78V(-)
304 <400> SEQUENCE: 24
305 ttccatatag accgtgcgac tgctggtatc           30
308 <210> SEQ ID NO: 25
309 <211> LENGTH: 354
310 <212> TYPE: DNA
311 <213> ORGANISM: Mouse
313 <220> FEATURE:
314 <221> NAME/KEY: CDS
315 <222> LOCATION: (1)..(354)
316 <223> OTHER INFORMATION: 5H
318 <400> SEQUENCE: 25
319 cag gtc cag ctg cag cag tct ggg tct gag atg gcg agg cct gga gct     48
320 Gln Val Gln Leu Gln Gln Ser Gly Ser Glu Met Ala Arg Pro Gly Ala
321 1               5                   10                  15
323 tca gtg aag ctg ccc tgc aag gct tct ggc gac aca ttc acc agt tac     96
324 Ser Val Lys Leu Pro Cys Lys Ala Ser Gly Asp Thr Phe Thr Ser Tyr
325             20                  25                  30
327 tgg atg cac tgg gtg aag cag agg cat gga cat ggc cct gag tgg atc    144
328 Trp Met His Trp Val Lys Gln Arg His Gly His Gly Pro Glu Trp Ile
329         35                  40                  45
331 gga aat att tat cca ggt agt ggt ggt act aac tac gct gag aag ttc    192
332 Gly Asn Ile Tyr Pro Gly Ser Gly Gly Thr Asn Tyr Ala Glu Lys Phe
333     50                  55                  60
335 aag aac aag gtc act ctg act gta gac agg tcc tcc cgc aca gtc tac    240
336 Lys Asn Lys Val Thr Leu Thr Val Asp Arg Ser Ser Arg Thr Val Tyr
337 65                  70                  75                  80
339 atg cac ctc agc agg ctg aca tct gag gac tct gcg gtc tat tat tgt    288
340 Met His Leu Ser Arg Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
341             85                  90                  95
343 aca aga tcg ggg ggt ccc tac ttc ttt gac tac tgg ggc caa ggc acc    336
344 Thr Arg Ser Gly Gly Pro Tyr Phe Phe Asp Tyr Trp Gly Gln Gly Thr
345             100                 105                 110
347 act ctc aca gtc tcc tcc                                             354
348 Thr Leu Thr Val Ser Ser
349         115
352 <210> SEQ ID NO: 26
353 <211> LENGTH: 342
354 <212> TYPE: DNA
355 <213> ORGANISM: Mouse
357 <220> FEATURE:
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 02/24/2004
PATENT APPLICATION: US/10/642,284   TIME: 14:34:57

Input Set : A:\2004-02-18 4600-0106P.ST25.txt
Output Set: N:\CRF4\02242004\J642284.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,2,3
Seq#:2; N Pos. 1,2,3
Seq#:3; N Pos. 1,2,3
Seq#:4; N Pos. 1,2,3
Seq#:5; N Pos. 1,2,3
Seq#:6; N Pos. 1,2,3
Seq#:7; N Pos. 1,2,3
Seq#:8; N Pos. 1,2,3
Seq#:9; N Pos. 1,2,3
Seq#:10; N Pos. 1,2,3
Seq#:11; N Pos. 1,2,3
Seq#:12; N Pos. 1,2,3

VARIABLE LOCATION SUMMARY   DATE: 02/24/2004
PATENT APPLICATION: **US/10/642,284**   TIME: 14:34:57

Input Set : A:\2004-02-18 4600-0106P.ST25.txt
Output Set: N:\CRF4\02242004\J642284.raw

<u>Use of n's or Xaa's(NEW RULES)</u>: *Error Explanation:*
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is <u>MANDATORY</u> if n's or <u>Xaa</u>'s are <u>present</u>.
in <u>220></u> to <223> section, please explain location of n or Xaa, and which
<u>residue n or Xaa represents</u>.

Seq#:1; N Pos. 1,2,3
Seq#:2; N Pos. 1,2,3
Seq#:3; N Pos. 1,2,3
Seq#:4; N Pos. 1,2,3
Seq#:5; N Pos. 1,2,3
Seq#:6; N Pos. 1,2,3
Seq#:7; N Pos. 1,2,3
Seq#:8; N Pos. 1,2,3
Seq#:9; N Pos. 1,2,3
Seq#:10; N Pos. 1,2,3
Seq#:11; N Pos. 1,2,3
Seq#:12; N Pos. 1,2,3

VERIFICATION SUMMARY   DATE: 02/24/2004
PATENT APPLICATION: **US/10/642,284**   TIME: 14:34:57

Input Set : **A:\2004-02-18 4600-0106P.ST25.txt**
Output Set: **N:\CRF4\02242004\J642284.raw**

```
L:28  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:1
L:28  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:1
L:28  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:40  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:2
L:40  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:2
L:40  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:52  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:3
L:52  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:3
L:52  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:64  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4
L:64  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4
L:64  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:76  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:5
L:76  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:5
L:76  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:88  M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:6
L:88  M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:6
L:88  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:100 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:7
L:100 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:7
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:112 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:8
L:112 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:8
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:125 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:9
L:125 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:9
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:137 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:10
L:137 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:10
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:149 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:11
L:149 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:11
L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:161 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:12
L:161 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:12
L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
```